

## Participant Questionnaire

Participant number: 10

Date: 6/28/2023

Location: Brescia, IT

HRC Study / Algorithms tested: HAMP-S, STAP-PDF, HAMP-P

Study Conducted by: Jared Flowers

Participant link lengths/dimensions: (meters, "spine" is pelvis to shoulder midpoint, "shoulders" is shoulder to shoulder)

Spine	<u>0.75</u>
Neck	<u>0.15</u>
Shoulders	<u>0.45</u>

Left Upper Arm	<u>0.29</u>
Left Forearm	<u>0.22</u>

Right Upper Arm	<u>.28</u>
Right Forearm	<u>.22</u>

Participant joint diameter: (meters)

Left Elbow	<u>.06</u>
Left Wrist	<u>.05</u>

Right Elbow	<u>.06</u>
Right Wrist	<u>.05</u>

### Questions:

- How safe did you feel? (0 is not safe at all, 5 is neutral, 10 is very safe)
- Do you think the robot hindered your motions during the task? (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)
- Did the robot perform logical motions? (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)
- What is your overall satisfaction with the HRC task? (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)

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**For Task 1 (engine parts):** (circle your answer to each question)

Task 1, Method 1:										
Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)										
0	1	2	3	4	5	6	7	8	9	10
Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)										
0	1	2	3	4	5	6	7	8	9	10
Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)										
0	1	2	3	4	5	6	7	8	9	10
Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	1	2	3	4	5	6	7	8	9	10

Task 1, Method 2:										
Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)										
0	1	2	3	4	5	6	7	8	9	10
Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)										
0	1	2	3	4	5	6	7	8	9	10
Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)										
0	1	2	3	4	5	6	7	8	9	10
Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	1	2	3	4	5	6	7	8	9	10

Task 1, Method 3:										
Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)										
0	1	2	3	4	5	6	7	8	9	10
Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)										
0	1	2	3	4	5	6	7	8	9	10
Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)										
0	1	2	3	4	5	6	7	8	9	10
Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	1	2	3	4	5	6	7	8	9	10

**Comments:**

**For Task 2 (Sharework parts: metal tabs, cylinders, pallets):** (circle your answer to each question)

Task 2, Method 1:										
Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)										
0	1	2	3	4	5	6	7	8	9	10
Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)										
0	1	2	3	4	5	6	7	8	9	10
Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)										
0	1	2	3	4	5	6	7	8	9	10
Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	1	2	3	4	5	6	7	8	9	10

Task 2, Method 2:										
Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)										
0	1	2	3	4	5	6	7	8	9	10
Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)										
0	1	2	3	4	5	6	7	8	9	10
Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)										
0	1	2	3	4	5	6	7	8	9	10
Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	1	2	3	4	5	6	7	8	9	10

Task 2, Method 3:										
Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)										
0	1	2	3	4	5	6	7	8	9	10
Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)										
0	1	2	3	4	5	6	7	8	9	10
Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)										
0	1	2	3	4	5	6	7	8	9	10
Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	1	2	3	4	5	6	7	8	9	10

**Comments:**